



PATENT APPLICATION

File No: 00-56

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Wayne R. Kindsvogel, Stavros Topouzis  
Serial No. : 09/925,055  
Group Art Unit : 1644  
Examiner :  
Filed : August 8, 2001  
For : SOLUBLE ZCYTOR11 CYTOKINE RECEPTORS  
Date Submitted : October 15, 2001

**RESPONSE TO NOTICE TO FILE MISSING PARTS**

Box Missing Parts  
Commissioner for Patents  
Washington, DC 20231

Sir:

Respectfully submitted herewith is the Combined Declaration and Power of Attorney signed and dated by Applicants for the above-captioned application. This submission is in response to the Notice to File Missing Parts dated October 4, 2001 (a copy thereof is attached hereto) and is being filed within two months of the date of the letter.

Also submitted herewith are a corrected sequence listing and a substitute sequence listing diskette. This submission is in response to the aforementioned Notice to File Missing Parts dated October 4, 2001.

In each case the sequences were designated "Artificial Sequence." Explanation of the source of genetic material is required (sections <220> to <223>), but was mistakenly omitted. The changes, per the Sequence Listing Error Summary, Item 11, (attached to Notice to File Missing Parts dated October 4, 2001), were made in accordance with the sequence listing rule 37 CFR §1.823, and with support in the originally filed application as follows:

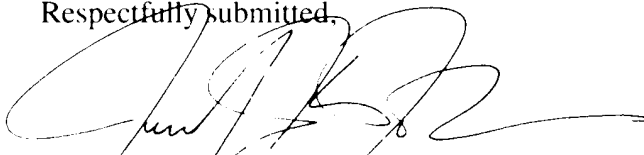
- SEQ ID NO. 30 – Supported in SEQ ID NO. 29

These changes are supported in the originally filed application and hence include no new matter.

The content of the above-captioned application and the computer readable copy is the same and, where applicable, includes no new matter as required by 37 CFR 1.821-1.825.

Applicants claim small entity status. Please charge the total fee, estimated to be \$65.00, to ZymoGenetics, Inc., Deposit Account No. 26-0290. A duplicate of this sheet is enclosed.

Respectfully submitted,



Jennifer K. Johnson, J.D.  
Registration No. 43,696



## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/925,055	08/08/2001	Wayne R. Kindsvogel	00-56

CONFIRMATION NO. 2607

## FORMALITIES LETTER



\*OC00000006842991\*

ZymoGenetics, Inc  
1201 Eastlake Avenue East  
Seattle, WA 98102

Date Mailed: 10/04/2001

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted*

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(l) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 65.**
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

*A copy of this notice MUST be returned with the reply.*

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



PATENT APPLICATION

File No: 00-56

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Wayne R. Kindsvogel, Stavros Topouzis  
Serial No. : 09/925,055  
Group Art Unit : 1644  
Examiner :  
Filed : August 8, 2001  
For : SOLUBLE ZCYTOR11 CYTOKINE RECEPTORS

**CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)**

Box Missing Parts  
Commissioner for Patents  
Washington, DC 20231

Sir:

I hereby certify that the attached correspondence comprising:

1. Return Postcard
2. Response to Notice to File Missing Parts (in duplicate)
3. Copy of Notice to File Missing Parts
4. Executed Combined Declaration and Power of Attorney
5. Sequence Listing Diskette compliant with 37 CFR 1.821-1.825
6. Paper Copy of Sequence Listing

is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Box Missing Parts  
Commissioner for Patents  
Washington, DC 20231

on October 15, 2001.

Marianne Carello  
Marianne Carello



## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/925,055  
Source: OIP  
Date Processed by STIC: 08/16/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

## Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION
----------------	----------------------

SERIAL NUMBER: 04/925,055

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1.        **Wrapped Nucleics**  
    **Wrapped Aminos**      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2.        **Invalid Line Length**      The rules require that a line not exceed 72 characters in length. This includes white spaces.
3.        **Misaligned Amino**  
    **Numbering**      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use **space characters**, instead.
4.        **Non-ASCII**      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please **ensure your subsequent submission is saved in ASCII text**.
5.        **Variable Length**      Sequence(s)        contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6.        **PatentIn 2.0**  
    **"bug"**      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)       . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7.        **Skipped Sequences**  
    **(OLD RULES)**      Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence:  
                            (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                            (i)         SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                            (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                            This sequence is intentionally skipped  
  
                            Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8.        **Skipped Sequences**  
    **(NEW RULES)**      Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence.  
                            <210> sequence id number  
                            <400> sequence id number  
                            000
9.        **Use of n's or Xaa's**  
    **(NEW RULES)**      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
                            Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                            In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10.        **Invalid <213>**  
    **Response**      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11. ✓ **Use of <220>**      Sequence(s)   30   missing the <220> "Feature" and associated numeric identifiers and responses.  
                            Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
                            (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12.        **PatentIn 2.0**  
    **"bug"**      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

AMC – Biotechnology Systems Branch – 06/04/2001

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

OIKE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,055

DATE: 08/16/2001

TIME: 13:28:58

Input Set : A:\00-56.txt

Output Set: N:\CRF3\08162001\I925055.raw

Does Not Comply  
Corrected Diskette Needed

4 <110> APPLICANT: Kindsvogel, Wayne R.  
 5 Topouzis, Stavros  
 7 <120> TITLE OF INVENTION: SOLUBLE ZCYTOR11 CYTOKINE RECEPTORS  
 9 <130> FILE REFERENCE: 00-56  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/925,055  
 C--> 11 <141> CURRENT FILING DATE: 2001-08-08  
 11 <150> PRIOR APPLICATION NUMBER: US 60/223,827  
 12 <151> PRIOR FILING DATE: 2000-08-08  
 14 <150> PRIOR APPLICATION NUMBER: US 60/250,876  
 15 <151> PRIOR FILING DATE: 2000-12-01  
 17 <160> NUMBER OF SEQ ID NOS: 35  
 19 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 2831  
 23 <212> TYPE: DNA  
 24 <213> ORGANISM: Homo sapien  
 26 <220> FEATURE:  
 27 <221> NAME/KEY: CDS  
 28 <222> LOCATION: (34)...(1755)  
 30 <400> SEQUENCE: 1  
 31 tagaggccaa gggagggctc tgtgccagcc ccg atg agg acg ctg ctg acc atc 54  
 32 Met Arg Thr Leu Leu Thr Ile  
 33 1 5  
 35 ttg act gtg gga tcc ctg gct gct cac gcc cct gag gac ccc tcg gat 102  
 36 Leu Thr Val Gly Ser Leu Ala Ala His Ala Pro Glu Asp Pro Ser Asp  
 37 10 15 20  
 39 ctg ctc cag cac gtg aaa ttc cag tcc agc aac ttt gaa aac atc ctg 150  
 40 Leu Leu Gln His Val Lys Phe Gln Ser Ser Asn Phe Glu Asn Ile Leu  
 41 25 30 35  
 43 acg tgg gac agc ggg cca gag ggc acc cca gac acg gtc tac agc atc 198  
 44 Thr Trp Asp Ser Gly Pro Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile  
 45 40 45 50 55  
 47 gag tat aag acg tac gga gag agg gac tgg gtg gca aag aag ggc tgt 246  
 48 Glu Tyr Lys Thr Tyr Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys  
 49 60 65 70  
 51 cag cgg atc acc cgg aag tcc tgc aac ctg acg gtg gag acg ggc aac 294  
 52 Gln Arg Ile Thr Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn  
 53 75 80 85  
 55 ctc acg gag ctc tac tat gcc agg gtc acc gct gtc agt gcg gga ggc 342  
 56 Leu Thr Glu Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly  
 57 90 95 100  
 59 cgg tca gcc acc aag atg act gac agg ttc agc tct ctg cag cac act 390  
 60 Arg Ser Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr  
 61 105 110 115  
 63 acc ctc aag cca cct gat gtg acc tgt atc tcc aaa gtg aga tcg att 438  
 64 Thr Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile  
 65 120 125 130 135

Errored  
 Check diskette  
 8/16/01



## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,055

DATE: 08/16/2001

TIME: 13:28:58

Input Set : A:\00-56.txt

Output Set : N:\CRF3\08162001\I925055.raw

67	cag atg att gtt cat cct acc ccc acg cca atc cgt gca ggc gat ggc	486
68	Gln Met Ile Val His Pro Thr Pro Thr Pro Ile Arg Ala Gly Asp Gly	
69	140 145 150	
71	cac cgg cta acc ctg gaa gac atc ttc cat gac ctg ttc tac cac tta	534
72	His Arg Leu Thr Leu Glu Asp Ile Phe His Asp Leu Phe Tyr His Leu	
73	155 160 165	
75	gag ctc cag gtc aac cgc acc tac caa atg cac ctt gga ggg aag cag	582
76	Glu Leu Gln Val Asn Arg Thr Tyr Gln Met His Leu Gly Gly Lys Gln	
77	170 175 180	
79	aga gaa tat gag ttc ttc ggc ctg acc cct gac aca gag ttc ctt ggc	630
80	Arg Glu Tyr Glu Phe Phe Gly Leu Thr Pro Asp Thr Glu Phe Leu Gly	
81	185 190 195	
83	acc atc atg att tgc gtt ccc acc tgg gcc aag gag agt gcc ccc tac	678
84	Thr Ile Met Ile Cys Val Pro Thr Trp Ala Lys Glu Ser Ala Pro Tyr	
85	200 205 210 215	
87	atg tgc cga gtg aag aca ctg cca gac cgg aca tgg acc tac tcc ttc	726
88	Met Cys Arg Val Lys Thr Leu Pro Asp Arg Thr Trp Thr Tyr Ser Phe	
89	220 225 230	
91	tcc gga gcc ttc ctg ttc tcc atg ggc ttc ctc gtc gca gta ctc tgc	774
92	Ser Gly Ala Phe Leu Phe Ser Met Gly Phe Leu Val Ala Val Leu Cys	
93	235 240 245	
95	tac ctg agc tac aga tat gtc acc aag ccg cct gca cct ccc aac tcc	822
96	Tyr Leu Ser Tyr Arg Tyr Val Thr Lys Pro Pro Ala Pro Pro Asn Ser	
97	250 255 260	
99	ctg aac gtc cag cga gtc ctg act ttc cag ccg ctg cgc ttc atc cag	870
100	Leu Asn Val Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln	
101	265 270 275	
103	gag cac gtc ctg atc cct gtc ttt gac ctc agc ggc ccc agc agt ctg	918
104	Glu His Val Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu	
105	280 285 290 295	
107	gcc cag cct gtc cag tac tcc cag atc agg gtg tct gga ccc agg gag	966
108	Ala Gln Pro Val Gln Tyr Ser Gln Ile Arg Val Ser Gly Pro Arg Glu	
109	300 305 310	
111	ccc gca gga gct cca cag cgg cat agc ctg tcc gag atc acc tac tta	1014
112	Pro Ala Gly Ala Pro Gln Arg His Ser Leu Ser Glu Ile Thr Tyr Leu	
113	315 320 325	
115	ggg cag cca gac atc tcc atc ctc cag ccc tcc aac gtg cca cct ccc	1062
116	Gly Gln Pro Asp Ile Ser Ile Leu Gln Pro Ser Asn Val Pro Pro Pro	
117	330 335 340	
119	cag atc ctc tcc cca ctg tcc tat gcc cca aac gct gcc cct gag gtc	1110
120	Gln Ile Leu Ser Pro Leu Ser Tyr Ala Pro Asn Ala Ala Pro Glu Val	
121	345 350 355	
123	ggg ccc cca tcc tat gca cct cag gtg acc ccc gaa gct caa ttc cca	1158
124	Gly Pro Pro Ser Tyr Ala Pro Gln Val Thr Pro Glu Ala Gln Phe Pro	
125	360 365 370 375	
127	ttc tac gcc cca cag gcc atc tct aag gtc cag cct tcc tcc tat gcc	1206
128	Phe Tyr Ala Pro Gln Ala Ile Ser Lys Val Gln Pro Ser Ser Tyr Ala	
129	380 385 390	
131	cct caa gcc act ccg gac agc tgg cct ccc tcc tat ggg gta tgc atg	1254

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,055

DATE: 08/16/2001

TIME: 13:28:58

Input Set : A:\00-56.txt

Output Set: N:\CRF3\08162001\I925055.raw

132	Pro	Gln	Ala	Thr	Pro	Asp	Ser	Trp	Pro	Pro	Ser	Tyr	Gly	Val	Cys	Met	
133				395					400					405			
135	gaa	ggt	tct	ggc	aaa	gac	tcc	ccc	act	ggg	aca	ctt	tct	agt	cct	aaa	1302
136	Glu	Gly	Ser	Gly	Lys	Asp	Ser	Pro	Thr	Gly	Thr	Leu	Ser	Ser	Pro	Lys	
137			410					415					420				
139	cac	ctt	agg	cct	aaa	ggt	cag	ctt	cag	aaa	gag	cca	cca	gct	gga	agc	1350
140	His	Leu	Arg	Pro	Lys	Gly	Gln	Leu	Gln	Lys	Glu	Pro	Pro	Ala	Gly	Ser	
141			425				430					435					
143	tgc	atg	tta	ggt	ggc	ctt	tct	ctg	cag	gag	gtg	acc	tcc	ttg	gct	atg	1398
144	Cys	Met	Leu	Gly	Gly	Leu	Ser	Leu	Gln	Glu	Val	Thr	Ser	Leu	Ala	Met	
145	440				445					450						455	
147	gag	gaa	tcc	caa	gaa	gca	aaa	tca	ttg	cac	cag	ccc	ctg	ggg	att	tgc	1446
148	Glu	Glu	Ser	Gln	Glu	Ala	Lys	Ser	Leu	His	Gln	Pro	Leu	Gly	Ile	Cys	
149				460					465					470			
151	aca	gac	aga	aca	tct	gac	cca	aat	gtg	cta	cac	agt	ggg	gag	gaa	ggg	1494
152	Thr	Asp	Arg	Thr	Ser	Asp	Pro	Asn	Val	Leu	His	Ser	Gly	Glu	Glu	Gly	
153			475					480						485			
155	aca	cca	cag	tac	cta	aag	ggc	cag	ctc	ccc	ctc	ctc	tcc	tca	gtc	cag	1542
156	Thr	Pro	Gln	Tyr	Leu	Lys	Gly	Gln	Leu	Pro	Leu	Leu	Ser	Ser	Val	Gln	
157			490					495					500				
159	atc	gag	ggc	cac	ccc	atg	tcc	ctc	cct	ttg	caa	cct	cct	tcc	ggt	cca	1590
160	Ile	Glu	Gly	His	Pro	Met	Ser	Leu	Pro	Leu	Gln	Pro	Pro	Ser	Gly	Pro	
161		505				510					515						
163	tgt	tcc	ccc	tcg	gac	caa	ggt	cca	agt	ccc	tgg	ggc	ctg	ctg	gag	tcc	1638
164	Cys	Ser	Pro	Ser	Asp	Gln	Gly	Pro	Ser	Pro	Trp	Gly	Leu	Leu	Glu	Ser	
165	520				525					530						535	
167	ctt	gtg	tgt	ccc	aag	gat	gaa	gcc	aag	agc	cca	gcc	cct	gag	acc	tca	1686
168	Leu	Val	Cys	Pro	Lys	Asp	Glu	Ala	Lys	Ser	Pro	Ala	Pro	Glu	Thr	Ser	
169				540					545					550			
171	gac	ctg	gag	cag	ccc	aca	gaa	ctg	gat	tct	ctt	ttc	aga	ggc	ctg	gcc	1734
174	Asp	Leu	Glu	Gln	Pro	Thr	Glu	Leu	Asp	Ser	Leu	Phe	Arg	Gly	Leu	Ala	
175			555					560						565			
177	ctg	act	gtg	cag	tgg	gag	tcc	tgaggggaat	gggaaaggct	tggtgcttcc							1785
178	Leu	Thr	Val	Gln	Trp	Glu	Ser										
179			570														
181	tccctgtccc	taccagtg	gacatccttg	gctgtcaatc	ccatgcctgc	ccatgcccaca											1845
182	cactctgcga	tctggcctca	gacgggtgcc	cttgagagaa	gcagagggag	tggcatgcag											1905
183	ggccccctgcc	atgggtgcgc	tcctcaccgg	aacaaagcag	catgataagg	actgcagcgg											1965
184	gggagctctg	gggagcagct	tgtgtagaca	agcgcgtgct	cgctgagccc	tgcaaggcag											2025
185	aaatgacagt	gcaaggagga	aatgcaggga	aactcccag	gtccagagcc	ccacctccta											2085
186	acaccatgga	ttcaaagtgc	tcagggaatt	tgcctctcct	tgccccattc	ctggccagtt											2145
187	tcacaatcta	gctcgacaga	gcatgaggcc	cctgcctctt	ctgtcattgt	tcaaagggtg											2205
188	gaagagagcc	tggaaaagaa	ccaggcctgg	aaaagaacca	gaaggaggct	gggcagaacc											2265
189	agaacaacct	gcacttctgc	caaggccagg	gccagcagga	cggcaggact	ctagggaggg											2325
190	gtgtggcctg	cagctcattc	ccagccaggg	caactgcctg	acgttgcacg	atttcagctt											2385
191	cattcctctg	atagaacaaa	gcgaaatgca	ggtccaccag	ggagggagac	acacaagcct											2445
192	tttctgcagg	caggagtctc	agaccctatc	ctgagaatgg	ggtttgaaag	gaagggtgagg											2505
193	gctgtggccc	ctggacgggt	acaataacac	actgtactga	tgtcacaact	ttgcaagctc											2565
194	tgccttgggt	tcagcccatc	tgggctcaaa	ttccagcctc	accactcaca	agctgtgtga											2625

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,055

DATE: 08/16/2001

TIME: 13:28:58

Input Set : A:\00-56.txt

Output Set : N:\CRF3\08162001\I925055.raw

```

195 cttcaaacaa atgaaatcag tgcccagaac ctccggtttcc tcatctgtaa tgtggggatc 2685
196 ataacaccta cctcatggag ttgtggtgaa gatgaaatga agtcatgtct ttaaagtgtc 2745
197 taatagtgcc tggtagatgg gcagtgccca ataaacggtg gctattttaaa aaaaaaaaaa 2805
198 aaaaaaaaaa atagcggccg cctcga 2831
200 <210> SEQ ID NO: 2
201 <211> LENGTH: 574
202 <212> TYPE: PRT
203 <213> ORGANISM: Homo sapien
205 <400> SEQUENCE: 2
206 Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala His
207 1 5 10 15
208 Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe Gln Ser
209 20 25 30
210 Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro Glu Gly Thr
211 35 40 45
212 Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr Gly Glu Arg Asp
213 50 55 60
214 Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr Arg Lys Ser Cys Asn
215 65 70 75 80
216 Leu Thr Val Glu Thr Gly Asn Leu Thr Glu Leu Tyr Tyr Ala Arg Val
217 85 90 95
218 Thr Ala Val Ser Ala Gly Gly Arg Ser Ala Thr Lys Met Thr Asp Arg
219 100 105 110
220 Phe Ser Ser Leu Gln His Thr Thr Leu Lys Pro Pro Asp Val Thr Cys
221 115 120 125
222 Ile Ser Lys Val Arg Ser Ile Gln Met Ile Val His Pro Thr Pro Thr
223 130 135 140
224 Pro Ile Arg Ala Gly Asp Gly His Arg Leu Thr Leu Glu Asp Ile Phe
225 145 150 155 160
226 His Asp Leu Phe Tyr His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln
227 165 170 175
228 Met His Leu Gly Gly Lys Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr
229 180 185 190
230 Pro Asp Thr Glu Phe Leu Gly Thr Ile Met Ile Cys Val Pro Thr Trp
231 195 200 205
232 Ala Lys Glu Ser Ala Pro Tyr Met Cys Arg Val Lys Thr Leu Pro Asp
233 210 215 220
234 Arg Thr Trp Thr Tyr Ser Phe Ser Gly Ala Phe Leu Phe Ser Met Gly
235 225 230 235 240
236 Phe Leu Val Ala Val Leu Cys Tyr Leu Ser Tyr Arg Tyr Val Thr Lys
237 245 250 255
238 Pro Pro Ala Pro Pro Asn Ser Leu Asn Val Gln Arg Val Leu Thr Phe
239 260 265 270
240 Gln Pro Leu Arg Phe Ile Gln Glu His Val Leu Ile Pro Val Phe Asp
241 275 280 285
242 Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro Val Gln Tyr Ser Gln Ile
243 290 295 300
244 Arg Val Ser Gly Pro Arg Glu Pro Ala Gly Ala Pro Gln Arg His Ser
245 305 310 315 320

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,055

DATE: 08/16/2001

TIME: 13:28:58

Input Set : A:\00-56.txt

Output Set : N:\CRF3\08162001\I925055.raw

```

246 Leu Ser Glu Ile Thr Tyr Leu Gly Gln Pro Asp Ile Ser Ile Leu Gln
247           325           330           335
248 Pro Ser Asn Val Pro Pro Pro Gln Ile Leu Ser Pro Leu Ser Tyr Ala
249           340           345           350
250 Pro Asn Ala Ala Pro Glu Val Gly Pro Pro Ser Tyr Ala Pro Gln Val
251           355           360           365
252 Thr Pro Glu Ala Gln Phe Pro Phe Tyr Ala Pro Gln Ala Ile Ser Lys
253           370           375           380
254 Val Gln Pro Ser Ser Tyr Ala Pro Gln Ala Thr Pro Asp Ser Trp Pro
255           385           390           395           400
256 Pro Ser Tyr Gly Val Cys Met Glu Gly Ser Gly Lys Asp Ser Pro Thr
257           405           410           415
260 Gly Thr Leu Ser Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln
261           420           425           430
262 Lys Glu Pro Pro Ala Gly Ser Cys Met Leu Gly Gly Leu Ser Leu Gln
263           435           440           445
264 Glu Val Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu
265           450           455           460
266 His Gln Pro Leu Gly Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val
267           465           470           475           480
268 Leu His Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln Leu
269           485           490           495
270 Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser Leu Pro
271           500           505           510
272 Leu Gln Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln Gly Pro Ser
273           515           520           525
274 Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys Asp Glu Ala Lys
275           530           535           540
276 Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln Pro Thr Glu Leu Asp
277           545           550           555           560
278 Ser Leu Phe Arg Gly Leu Ala Leu Thr Val Gln Trp Glu Ser
279           565           570
281 <210> SEQ ID NO: 3
282 <211> LENGTH: 211
283 <212> TYPE: PRT
284 <213> ORGANISM: Homo sapiens
286 <400> SEQUENCE: 3
287 Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe Gln Ser Ser
288   1           5           10           15
289 Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro Glu Gly Thr Pro
290           20           25           30
291 Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr Gly Glu Arg Asp Trp
292           35           40           45
293 Val Ala Lys Lys Gly Cys Gln Arg Ile Thr Arg Lys Ser Cys Asn Leu
294           50           55           60
295 Thr Val Glu Thr Gly Asn Leu Thr Glu Leu Tyr Tyr Ala Arg Val Thr
296           65           70           75           80
297 Ala Val Ser Ala Gly Arg Ser Ala Thr Lys Met Thr Asp Arg Phe
298           85           90           95

```

<210> 30  
 <211> 484  
 <212> PRT  
 <213> Artificial Sequence  
 <400> 30

Erroneous Field 223 is required  
 When 213 response is Artificial Sequence,  
 A ~~man~~ mandatory description or explanation  
 is required in field 223.

The type of errors shown <sup>may</sup> exist throughout  
 the Sequence Listing. Please check subsequent  
 sequences for similar errors.

## VERIFICATION SUMMARY

DATE: 08/16/2001

PATENT APPLICATION: US/09/925,055

TIME: 13:28:59

Input Set : A:\00-56.txt

Output Set: N:\CRF3\08162001\I925055.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1093 M:258 W: Mandatory Feature missing, &lt;220&gt; FEATURE:

L:1093 M:258 W: Mandatory Feature missing, &lt;223&gt; OTHER INFORMATION: